

CLAIMS

I claim:

1 1. A calibration system for calibrating orientation parameters of a digital
2 optoelectronic sensor system arranged in a mobile carrier for remote reconnaissance, said
3 calibration system comprising:
4 an attitude and position determining system for determining orientation
5 parameters of the optoelectronic sensor system;
6 an optoelectronic component emitting radiation in a defined direction with
7 respect to said attitude and position determining system;
8 a reference module arranged in a known fixed location; and
9 a planar optical detector arranged relative to said optoelectronic component for
10 receiving a reflection of the radiation emitted by said optoelectronic component and reflected
11 from said reference module, said planar optical detector being operatively connected to said
12 attitude and position determining system so that offsets in the orientation parameters
13 determined by said attitude and position determining system are detected by comparison of the
14 orientation parameters determined by said attitude and position determining system to
15 calculated orientation parameters computed using the reflection of the radiation received by
16 said planar optical detector and the known fixed location of said reference module.

1 2. The calibration device of claim 1, wherein said optoelectronic component
2 comprises a laser diode.

112
2 or more ?

1 3. The calibration system of claim 1, wherein said planar optical detector
2 comprises a CCD matrix.

1 4. The calibration system of claim 1, further comprising a CCD line
2 scanner comprising CCD lines arranged on a focal plane of device optics for obtaining remote
3 reconnaissance data, wherein said planar optical detector is arranged between said CCD lines.

1 5. The calibration device of claim 4, wherein said optoelectronic
2 components are arranged between said focal plane and said device optics such that they are
3 located outside a beam path of useful radiation of said CCD lines.

1 6. The calibration device of claim 1, wherein said reference module
2 comprises a mirror set in concrete.